

OBSERVATIONS ON THE BREEDING OF THE OBLONG TURTLE (*CHELODINA OBLONGA*)

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INTRODUCTION

Female Oblong Turtles (*Chelodina oblonga*) are a common sight in the south-west of Western Australia in spring while they move from swamps to higher ground to lay their eggs. Nests have been studied by Russ (1970), Nicholson (1975) and Clay (1981) but there are few data on clutch size and incubation periods for this species.

On 25 October 1982 I watched a female Oblong Turtle walk 300 m from the western edge of Lake Joondalup (31°47'S 115°48'E) to a sheltered position (under the eaves) of our house. It excavated a hole 15 cm deep and laid 9 eggs. The nest site was kept slightly moist with tap water, shaded during very hot weather, protected by a cage and kept under observation. On 12 August 1983, 291 days after being laid, 7 hatchlings emerged from the nest.

For the first 90 days the hatchlings were kept in a container 60 x 25 cm which was filled with 8-10 cm of clean, damp sand. At one end was a container of water 2-6 cm deep which enabled the turtles to enter and leave the water at will. After 90 days, and until the present (20 April 1984) they have been kept in an aquarium 60 x 25 x 30 cm filled with water to a depth of 22 cm and stocked with *Gambusia affinis* and water plants.

OBSERVATIONS

- Day 1 (12 August 1983) Seven eggs hatched, the first at 1100 hrs, the last at 1700 hrs. Each hatchling had a carapace length of 30 mm (\pm 5 mm). The remaining 2 eggs were dug up a few weeks later. One was infertile, the other contained a fully formed dead turtle.
- Days 1-23 Hatchlings spent their time swimming, basking, buried or feeding on mosquito larvae and water fleas (*Daphnia*). On day 23 one of them began to slough scales.
- Day 31 A few small fish (*Gambusia affinis*) that were introduced to the water were eaten.
- Day 32 Dug up 2 turtles which had been buried since day 5. Both active.
- Day 45 Turtles seen eating water plants which had been introduced to their container.
- Day 46 Hatchlings now had grey-green spots on head and carapace.
- Day 50 Most of remaining turtles had begun sloughing.
- Day 55 The last turtle began sloughing.
- Day 109 Hatchlings began sloughing for the second time.
- Day 263 Of the seven turtles the longest carapace was 97 mm and the shortest 83 mm.

COMMENTS

Clay (1981) recognised two breeding seasons at his study sight at Thompsons Lake near Fremantle (September-November and December-January). The incubation period for his spring breeding period was 210-220 days compared to 181, 253 and 291 days for the nests studied by Russ, Nicholson and myself respectively. Spring clutch sizes in these studies varied between 2-15.

REFERENCES

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ZOOGEOGRAPHICAL IMPORTANCE OF TROPICAL MARINE MOLLUSC SPECIES AT ROTTNEST ISLAND, WESTERN AUSTRALIA

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ABSTRACT

The marine mollusc species recorded from the western end of Rottnest I. are shown to have a tropical component twice as large as that of the eastern end of Rottnest I. or along